



# GOD'S TREES

Trees, forests and wood in the Bible  
*An illustrated commentary and compendium*

SECOND EDITION

Professor Julian Evans OBE FICFor

*Artwork by Veronica Pinchen*





© Day One Publications 2014 First printed 2014

Reprinted with minor revisions 2015

Second Edition 2018

ISBN 978-1-84625-410-9

Scripture quotations taken from The Holy Bible, New International Version (Anglicised edition)

Copyright ©1979, 1984, 2011 by Biblica (formerly international Bible Society).

Used by permission of Hodder & Stoughton Publishers, an Hachette UK company.

All rights reserved.

'NIV' is a registered trademark of Biblica (formerly international Bible Society).

UK trademark number 1448790

British Library Cataloguing in Publication Data available

Published by Day One Publications, Ryelands Road, Leominster, HR6 8NZ

Tel 01568 613 740

North America Toll Free 888 329 6630

email—sales@dayone.co.uk web site—www.dayone.co.uk

All rights reserved

No part of this publication may be reproduced, or stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording or otherwise, without the prior permission of Day One Publications.

Design by Steve Devane

Second Edition revisions by smallprint

Printed by LF Book Services Ltd





*To the memory of my late wife,  
Margaret,  
who would have rejoiced to see this book  
which had its beginnings with us back in the 1980s*





## CONTENTS

PREFACE	<b>viii</b>
PREFACE TO THE SECOND EDITION	<b>ix</b>
ACKNOWLEDGEMENTS	<b>x</b>
<b>1</b> 'AND GOD SAW THAT IT WAS GOOD'	<b>3</b>
<i>Genesis 1–4</i>	
<b>2</b> FROM ARK TO ARK	<b>15</b>
<i>Genesis 5–50 and Exodus</i>	
<b>3</b> USE AND ABUSE OF TREES	<b>29</b>
<i>Leviticus—Deuteronomy</i>	
<b>4</b> DEFINING BOUNDARIES AND SETTING SEALS	<b>41</b>
<i>Joshua, Judges and Ruth</i>	
<b>5</b> THE BARTER OF KINGS	<b>53</b>
<i>Samuel—Chronicles</i>	
<b>6</b> METAPHORS OF PEACE, PERMANENCE AND PROSPECT	<b>69</b>
<i>Ezra—Song of Solomon</i>	
<b>7</b> PROPHETS—PASTORAL AND PAINFUL	<b>87</b>
<i>Isaiah, Jeremiah and Lamentations</i>	
<b>8</b> TREES IN CONTEXT AND OUT	<b>107</b>
<i>Ezekiel—Malachi</i>	
<b>9</b> THE NATURAL ILLUSTRATION— TREES AND WOOD IN JESUS' LIFE AND TIMES	<b>123</b>
<i>The four gospels, Part 1</i>	
<b>10</b> THE FINAL JOURNEY TO A WOODEN CROSS	<b>135</b>
<i>The four gospels, Part 2</i>	
<b>11</b> FAITH, FLOTSAM AND A FUTURE IN THE TREE OF LIFE	<b>147</b>
<i>Acts—Revelation</i>	
COMPENDIUM OF TREE SPECIES	<b>161</b>
SEEING AND GROWING BIBLICAL TREES AND SHRUBS	<b>179</b>
INDEX OF SCRIPTURAL REFERENCES	<b>181</b>
TREE SPECIES INDEX	<b>190</b>
GENERAL INDEX	<b>194</b>



## PREFACE

Writing this book has been something of a personal journey bringing together my career in forestry and my commitment as a Christian. At times I have felt greatly humbled and offer this book with some trepidation. Bible scholars may despair in places at my exegesis while fellow professionals may wonder at the mixing of forestry and faith. Yet, for me, this goes to the heart of what is attempted.

I am no Hebrew or Greek scholar and am conscious that not only do we need to seek the best translation for plants and trees—and there is much uncertainty—but also the harder matter of cultural context. Many references to trees are symbolic, allegorical or used as metaphor. It is difficult for us to take ourselves back 2000 or 3000 years to the world in which the Bible was written and appreciate the frames of reference then current, and how people understood the world and the way it worked. This is none more so than in that greatest of opening chapters, Genesis Chapter 1.

In approaching ‘*God’s Trees: Trees, forests and wood in the Bible*’ I felt it should have two parts: the main one is a simple commentary book by book through the Old and New Testaments as we come across references or points of interest to our theme. The second and smaller part is a compendium with further details and notes about the trees and shrubs we meet. They are brought together for ease of reference. Throughout, numerous photographs and the artwork immeasurably add to the text.

My own forestry career has focused on both the temperate and the tropical. This undertaking took me to the less familiar world for me of the Mediterranean with its climate of wet winters and dry summers. That said, the germ of this book began in the 1980s and since then visits to Mediterranean or Biblical countries, always with an eye out for trees, have included Cyprus, Egypt, Eritrea, Ethiopia (several), Italy (several), Israel (twice), Malta, northern Iraq, Syria, and Turkey (twice). Recent visits to Turkey and Israel were made with this book very much in mind.

As a forest scientist I have sought accuracy without being guilty of forever hedging around remarks with uncertainties. The latter dulls the reader’s interest, but of course exposes the author’s fallibility. As noted in the acknowledgements to the many who have helped me, mistakes and shortcomings that remain are mine; as, of course, are my occasional reflective or devotional remarks.

The one overriding aim is to honour the Lord Jesus Christ in these pages.

**Julian Evans**

June 2013

## PREFACE TO THE SECOND EDITION

The success of *God's Trees* has surprised and delighted. Not only has it sold well, but it was a finalist in the People's Book Prize (non-fiction) 2014. Moreover numerous requests have been made of the author to speak and lecture on the subject so enabling me to share both my passion for trees and my passion for God. Since the book was published over 100 presentations have been delivered throughout Britain, on board cruise ships, and even in Africa. I am humbled by this interest: may the Lord be praised and honoured.

This new edition updates some points, adds some new material, and includes several new photographs mostly from recent visits to Israel, the West Bank, and Jordan. As a whole the book retains its original character and approach.

I would like to acknowledge here the generosity of two of Britain's foremost scientists who each gave me a copy of their own books on understanding the Bible and which bear on our theme of trees, forests and wood: Professor Sir Colin Humphreys CBE FRS *The Miracles of the Exodus – a scientist's discovery of the extraordinary natural causes of the biblical stories*. HarperCollins, New York; and Professor Sir Ghilleen Prance FRS *Go to the Ant – reflections on Biodiversity and the Bible*. Wild Goose Publications, Glasgow. I draw on both in some of the revisions included in this second edition of *God's Trees*.

I am grateful to Day One for their interest and support and that of my church in Alton.

My wife has been and is a wonderful encouragement and comes to almost every speaking engagement – men's prayer breakfasts excepted!

**Julian Evans**

July 2018

## ACKNOWLEDGEMENTS

A book of this kind relies heavily on the advice, suggestions and contributions from many people.

I am particularly grateful to those who undertook to read the whole of the book in draft:

Revd Clive Anderson, minister

Professor David Cutler, formerly of The Royal Botanic Gardens, Kew

Helen Reid, author

Dr Mike Render, chartered forester, Forestry Commission

and John White, formerly the Forestry Commission's dendrologist at Westonbirt Arboretum, for checking over the details in the compendium of tree species.

Several have kindly contributed illustrations, photographs or sourced pictures via the internet. In most cases the source is acknowledged in the relevant caption.

Clive and Amanda Anderson, Stephen Evans, Martyn Glass, Mr and Mrs R Johnson, Felix Leung, Daniel Luscombe, Tim Pinchen, and the late Bill Stewart.

The bulk of the photographs are unattributed and were taken by my wife, Margaret, or me. (If you have read the dedication you will now realise that I remarried, also to a Margaret, following my first wife's death.) A few photographs were taken in the Forestry Commission's Bedgebury National Pinetum where I was greatly assisted by Chris Reynolds and Daniel Luscombe. Several photographs were taken in the British Museum and this is noted in the captions. Twice Clive Anderson guided me around the Museum to exactly the exhibits I wanted to see!

Assembly and editing of the photographs was kindly undertaken by my son, Stephen.

I must express my gratitude to Veronica Pinchen for her beautiful artwork which has immeasurably added to the book.

In addition, the following provided all sorts of helps—encouragement, factual information, library searches, suggestions of books to refer to, additional contacts, where to find a specimen tree, and more.

Amanda Anderson, Renata Borosova, Dr John Brazier, Jim Carle, Shireen Chambers, Sue Cutler, Paul and Jane Easthope, Kay Fewtrell-Smith, Shahina Ghazanfar, Claire Glaister, Glenn Haines, John Jacobs, Dr Richard Jinks, Dr Gary Kerr, Chris Latham, Peter Latham, Julian Marcroft, Dr Liz O'Brien, Catherine Oldham, Cheryl Pilbeam, Chris Reynolds, Revd. Kelvin and Jane Taylor, Faye Thomsit, Chris Warwick, Revd. Paul Williams and Howard Wright.

Two unnamed people—an American lady working in the Jerusalem Botanic Garden who directed us to the new Bible Path she had helped establish and to the groundsman at Kibbutz Ma'agan, Galilee.

The late Nigel Hepper, author of the finest book on Bible plants '*Illustrated Encyclopedia of Bible Plants*' IVP (1992), encouraged me early on in this undertaking saying 'the field was open'. I am grateful, too, to his son, David Hepper.

I would also like to record the interest and support of DayOne's Managing director, Mark Roberts, and book designer, Steve Devane for helping bring this work to completion.

My immediate family, Jon and Christina Evans, Stephen, and Ben and Anna Evans, have been hugely encouraging. I must, too, single out my wife, Margaret, who has been both encouraging and



patient when at times things didn't go as smoothly as hoped! But even more, for she read an early draft and she was a great help when we made visits to Israel and Turkey, because she knew Israel well as her father, the late Bill Stewart, had helped train young Jewish men and women in basic farming who were joining the Kibbutz movement in the 1960s and 1970s. A couple of Bill's photographs appear in the book.

Despite all the above helps, any mistakes or errors that remain are mine.

I have prayed much about this book, and have referred above to the many who have given me help, it would be wrong of me and grossly dishonouring not to acknowledge the One who upholds and sustains all life, including our daily toil, and for whom the Christian is to do all things—Colossians 3:23

#### SPECIFIC ACKNOWLEDGEMENTS

Page 26. The illustration from Queen Hatshepsut's mortuary temple is re-drawn from an original drawing by F. Nigel Hepper (used by permission).

Page 57. Herbarium specimen of *Cedrus libani*. © The Board of Trustees of the Royal Botanic Gardens, Kew. Reproduced with the consent of the Royal Botanic Gardens, Kew.

Page 60. The relief from Seti's temple showing ropes guiding the fall of trees is reproduced from Meiggs (1982) with permission from Oxford University Press.

Page 121. The photo of Cedar of Lebanon trees at Bcharre sent to me by Jim Carle and kindly provided through The Global Environment Fund (GEF) supported project, "Safeguarding and Restoring Lebanon's Woodland Resources", within the Ministry of Environment, Lebanon.

Internet sourced pictures are credited in the relevant caption in the form: Jastrow (2006)/Wikimedia Commons









## Genesis 1–4

# ‘And God saw that it was good’

God smiled when he made trees. They were perfect; he looked and could find no fault. Yet they appear so ungainly if it was not that we are so used to them—rooted to the ground, but seeming to stretch with abandon in all directions. They are top heavy like a child’s toy tree, but endure storms and floods. Some trees live longer than Methuselah. Indeed, some still living today were alive from before Abraham: others are so tall that they would over-top every Egyptian pyramid bar two.

Trees are peculiar in other ways. Some bear flowers of only one sex like the great spreading terebinth (*Pistacia atlantica*), under which the Israelites would come to commit so much idolatry, so both male and female terebinth trees are needed to set fertile seed. Other trees, such as that most prized of all in the eastern Mediterranean, the cedar of Lebanon (*Cedrus libani*), bear flowers of both sexes at once as, indeed, most conifers do. Yet others bear male flowers some years and female ones in others such as our English ash. The wood of trees is similarly variable. It can be more durable than iron or so strong for its weight to be able to make aircraft. We could go on, but this is not a sentimental book. Our journey is tracing trees, forests, timber and wood in scripture to illustrate

and magnify God’s wisdom and love. But God has not always smiled. For central to the Bible’s story is His Son dying on a tree<sup>1</sup> (1 Pet. 2:24). He was the object of God’s own wrath to undo for us all the disobedience that plucking that first fruit from a tree led to (Gen. 3:6).

The chapters loosely follow the Bible’s chronology and the order of its books with remarks and observations added rather like a commentary. As we come across an identifiable reference to a specific kind of tree, we include its Latin name usually at its first mention, as above for terebinth and cedar of Lebanon, and then stay with the English thereafter. When appropriate we try to place the tree in its setting geographically and, as far as we can, culturally and socially. Some additional notes for each tree species are provided in the compendium. We try to address, too, the following questions. Is there a forest or woodland practice being described or alluded to? How might this help our understanding of the Bible verse? Is there symbolism or deeper meaning? We hope this book is both factual and, to a small degree, devotional, to add interest and to display the beauty and wonder of trees in scripture.

FACING PAGE: *Beautiful Tuscany countryside of cypress and oak, pine and poplar, i.e. conifer and broadleaved intermingled. Though to the north of Rome, perhaps a little like the landscape the Apostles Paul and Peter saw. Photo: S. Evans.*





## Seed bearing plants

Genesis 1

Trees are first mentioned, along with other seed bearing plants, in the middle of the Bible's opening chapter (Gen. 1:11–13). The Hebrew word for tree (*ets*) is used throughout the Old Testament and is a broad term including stick, wood and timber as well as tree. In one place we have the Aramaic for tree (*ilan*) in Nebuchadnezzar's dream which Daniel interprets (Dan. 4). Compared with the many names of thorns, thistles and spiny plants and shrubs, the Hebrews simply called a tree a tree unless they identified it by name with the difficulties for us of sometimes not being sure of the exact translation species by species.

The trees of the third day of creation have added the special provision that they reproduce after their kind. This reflects the wonder of the ancients that plants grew, dropped seed, and more of the same appeared and could be turned to advantage as the amazing basis of food production.<sup>2</sup> Botanists identify two great classes of seed bearing plants, called angiosperms and gymnosperms, which, for trees, equate with broadleaves and conifers or hardwoods and softwoods. Incidentally these last terms tell us nothing about how hard or dense the wood actually is: strictly speaking balsa is a 'hardwood' and yew is a 'softwood'! The important point, as the Bible asserts, is that pine seed will not give rise to a poplar tree nor a palm nut to a eucalypt.<sup>3</sup> This is an important principle. Continuance of life is not random, the young are as they are because of what their parents were like. We all know this of course, but it reveals order in the universe. This fact impressed many biblical writers. For example, James, in his letter near the end of the New Testament, questions how is it possible that man made in God's likeness can both praise him and curse him with the same lips? (Jas. 3:12). He pressed home his point by observing, 'My brothers, can a fig-tree bear olives, or a grape-vine bear figs?'

In this faithfulness of successive generations, we find in these verses (Gen. 1:11–13) the germ of another biblical principle—the coexistence of young and mature, of the newborn and the elderly, indeed, of family. While there are many forests comprising trees of the same age, both arising naturally as well

as, obviously, planted forests, the bulk of woodland and forest is like a family. Of course large mature trees do not in an anthropomorphic sense 'care' for their offspring, the young seedlings, but in many situations the environment of the woodland glade, sheltered from extremes of high winds and desiccating sun, is ideal for seed germination and initial growth. This is well seen in tropical rain forest where recolonisation of a gap left when some giant of the forest crashes down follows a well-defined succession of different species—early colonisers thriving in the new influx of light, secondary species, and then slower growing, long-lived ones. At each stage the trees both thrive in and modify the environment leading, if undisturbed, to the type of forest that there was before. Break this cycle or destroy the orderly succession such as by forest clearance, still so worryingly extensive in the tropics, and irretrievable damage can be done. So too, perhaps, the family unit, but the analogy must not be pressed.

The beautiful picture from the Tel Dan Nature Reserve, through which the Dan River flows as bubbling brooks and gushing torrents from the waters of Mount Hermon, illustrates this diversity. Many kinds of trees and shrubs of many ages are growing together. It is a little bit of paradise, almost 'A Garden of Eden', through which Israel's main tributary to the River Jordan flows.

Verses 11 and 12 of the Bible's first chapter (Gen. 1:11–12) are careful to use the plural emphasising variety and numbers of trees and plants. Trees, which we generally define as plants with a woody stem capable of growing unsupported to 6m (20 ft), form only a small proportion, about 15 per cent, of the 400,000 or so kinds of flowering plants in the world. In the Mediterranean region as a whole the tree flora is not particularly rich with around 290 indigenous tree species,<sup>4</sup> and in this book we will only be considering 30 or so in any detail. What is interesting, though, is the diversity of plant life not only in the actual Mediterranean region but where its climate, well known by its alliterative 'warm wet winters with westerly winds', occurs elsewhere around the world. Mediterranean type climates are only found in parts of California, central Chile, South Africa's Western Cape Province, and south





ABOVE: *Dan tributary in spate.*

and south-western Australia, just two per cent of the world's land surface. But this two per cent has nearly twenty per cent of the world's plant diversity.

Trees and plants are the first things made to inhabit the land God had formed and, as with all creation, God saw it was good. What a masterly and blessed understatement.

But we can say something else unique amongst creation—well almost—about trees and woodland. There are two sides to their benefit. Not only do they provide an astonishing range of products and benefits—posts, poles, paper, timber, firewood, fruits, fodder etc., but the presence of trees and forests protects the soil, modifies the local climate, provides shelter, stores carbon and provides numerous niches for wildlife. Unique among the world's resources, there is a duality: trees offer countless products to enjoy and countless benefits to confer for our and our planet's well-being.

### **Stewardship**

Genesis 1:30

As the creation account of Genesis 1 draws to a close, trees with fruit are given for food (Gen. 1:30) and, along with all else that fills the Earth, the charge that we are to 'subdue' what God has made. Probably

approaching half of all trees provide food or some other use for humans or their domestic animals. Consider how goats and camels browse semi-arid scrub as well as our enjoyment of the familiar apples, pears, citrus or olives. But it is the word translated 'subdue' or 'rule over', or 'have dominion' as it is in the Authorised Version, which has raised so many questions. Some see this as licence to exploit and hence explain man's ravaging of the Earth's precious resources. Certainly such exploitation has happened. For me as a forest scientist one of the clearest examples is destruction of Ethiopia's forest cover from forty per cent in the 1850s to less than four per cent of the land today. My visits there with Tearfund showed the consequences: widespread soil erosion, land degraded, and poor crops. No wonder when drought struck, the famine was 'biblical' to quote BBC commentator Michael Buerk as he reported the shocking scenes from the Korem camp in October 1984. As Bob Geldof lamented of the starving children, 'Do they know it's Christmas?'

The Mediterranean region has not escaped. The great savanna forests of North Africa known to the Romans and Carthaginians have long gone. Harbours once used by the Apostle Paul, for example



ABOVE: Looking west from Ephesus. The old harbour is now far inland owing to siltation because of deforestation.

Miletus and Ephesus in western Turkey, have long silted up and are now miles inland telling of years of muddy rivers and centuries of erosion from deforestation of distant hills inland. When Richard I led the crusade in 1191 at Wadi Felik near Tel Arzuf (Apollonia just north of modern day Tel Aviv) the Saracens lay in wait hiding in forests. A thousand years before, the Jewish historian, Josephus, described another battle in these woodlands. Today they are gone. And today clearance continues. Thirty years ago in northern Iraq one of Saddam Hussain's military tactics against the Kurds was to deforest the hills and so remove cover.

These accounts could be replicated again and again. Russell Meiggs<sup>5</sup> devotes a chapter to Mediterranean deforestation while J V Thirgood's

entire book<sup>6</sup> about *Man and the Mediterranean Forest* has the subtitle, 'A history of resource depletion'. Probably three-quarters of the pre-civilisation forest cover has gone.<sup>7</sup> We abrogated our God-given position and neglected environmental imperatives because of disregard and greed. But the words translated 'subdue' and 'rule' contain more the idea of civilised government of land under control rather than pillage or rape of resources. Joshua (Josh 17:18 & 18:1) has it exactly—wild, including forested, country being brought under control where it was needed. One aspect of development, including those fostered by Christian organisations, is care for and restoration of land qualities. Thus good land husbandry is an integral part of farming, forestry and rural development.





RIGHT: *Great beauty because of great care over many generations (Bedgebury National Pinetum),*

## The first garden

Genesis 2 & 3

Gardens are significant places in the Bible. A mention of Gethsemane or where Christ was buried (John 19:41) and straightaway the Christian is transported to the heart of the gospel. The Bible presents the Garden of Eden (Gen. 2:8–25) not as an imaginary or mythical paradise lost in times long past, but a real place in ‘Eden’, with real trees, and plenty of ‘real’ work to do. A garden God planted for man to enjoy and to tend. Moses gives precise, although not now adequately identifiable, details of its location: somewhere in the well watered low lying region of Mesopotamia is the best guess.<sup>8</sup> Much about the Garden foreshadows the rest of the Bible story, but the picture of the Lord God lovingly creating it, planting it, surely delights. The image Genesis conveys is of, ‘an enclosed designed landscape planted with trees, a kind of arboretum that was both pleasant to look at and useful as a food supply.’<sup>9</sup>

Gardens were important elsewhere and from the earliest times we meet them and how they are the root of the word ‘paradise’ in Chapter 5.

The account of the Garden of Eden has a particular resonance for foresters. God planting it and Adam working it pictures what foresters mostly do: they take over for a time the care and management of woodland and forest that another created and then pass it on to their successors. Rarely does the same person regenerate or plant a forest and then live to see all its benefits. We see ourselves as stewards of what we have inherited and, as my old professor would say, ‘must pass it on in better shape than when we received it’. Of course it’s not only foresters who have this sense of being custodians: those caring for orchards or a pedigree herd of cattle built up over the generations, or the great plant collections, botanic gardens, and arboreta such as Kew in England or the Arnold in America know the same sentiment.



## Pleasing to the eye

Genesis 2:9a

The great variety of trees and their value as good for food is reiterated in the second creation account of Genesis Chapter 2. But what excites me is the remark God reserves for trees—and trees alone—in all his creation (Gen. 2:9): *trees that were pleasing to the eye*. God saw they were good (Gen. 1:12), but here aesthetic appreciation, beauty and loveliness is declared good and desirable in its own right. Usefulness is important to God, but God shares our appreciation of the aesthetic or, rather, our capacity to admire the sunset or be thrilled by magnificent scenery or take pleasure in an evening stroll is a mark of His image within us. Humans, set apart from animals, are truly closer to God because we both like trees to be around! Thus it is almost to be expected that, later on, part of what tempted Adam and Eve to take the forbidden fruit was that they found its appearance appealing (Gen. 3:6).

This visual appreciation is actually therapeutic, it does us good. It is now well established that recovery



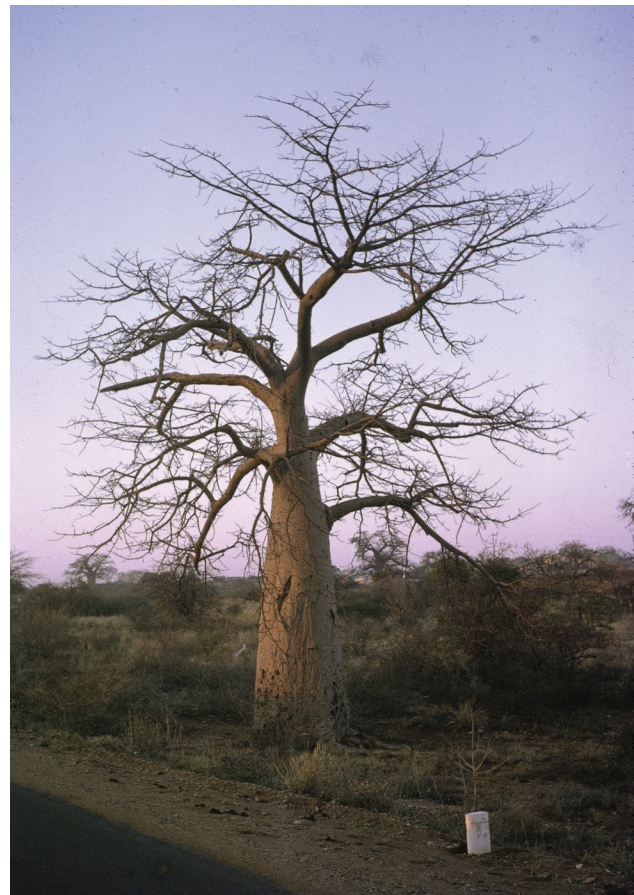
from illness or surgery is aided when a patient can look out on greenery as opposed to a brick wall or just the interior of a ward. The converse has also been found. An American study of 18 years data across fifteen states found significantly increased mortality and ill-health in the population where the insect emerald ash borer had killed ash trees and turned once tree-lined streets treeless.<sup>10</sup> A recent World Health Organization review reported the beneficial effects of urban green spaces on mental health, cardiovascular morbidity and mortality, obesity, type 2 diabetes and even improved pregnancy outcomes.<sup>11</sup>

So important today is the visual and aesthetic that in many countries laws protect trees of high amenity value. In Britain there are tree preservation orders with this intention uppermost. A tree evokes strange and powerful emotions, even passions—just consider how we respond to a threat to a much-loved tree, yet it is hardly surprising if God, in fact, made them for us to enjoy with all of our senses. So there is much more than even duality. Trees have uses, they confer benefits and they are lovely to behold: as our creator said, they are both good and pleasing.

## Two very special trees

Genesis 2:9b

In the same verse (Gen. 2:9) we are introduced to the first of two kinds of trees singled out by title, the tree of life and the tree of knowledge of good and evil. Regarding the first there is no tree today which can claim to be such an elixir though many healthy foods come from trees, and, as we've noted, forests themselves protect soil and help restore or heal degraded land. Nevertheless, some trees do symbolise life in the abundance they provide. The olive (*Olea europaea*) is a well-known example, but so too is the great baobab of the dry African bush. It is only in leaf for a few months, but this occurs in the dry season when most other trees have dropped theirs. The leaves themselves are edible, tasting a bit like spinach; the seeds are refreshing to suck and when soaked will make a palatable drink somewhat like coffee; the bark is soft and fibrous and can be used for making cloth, ropes and matting; and, in the crown of the tree, water can be found in tender



ABOVE: A young African baobab (*Adansonia digitata*) in the foreground with older, larger ones on the horizon: almost a 'tree of life', it's so useful.

shoots. During droughts elephants prise up the bark to get at water within. Legends abound about the wonderful baobab, not least that God planted it upside down! In contrast to the baobab's grotesquely fat and stubby appearance is the slender *Leucaena*, once the wonder tree of tropical development. It grows very fast, it enriches the soil, its foliage and pods make excellent fodder, and its woody stem is good for firewood or furniture. Sadly over-reliance on a few clones—trees propagated using the same genetic material—exposed this tree to a devastating pest and its use today is much curtailed.<sup>12</sup>

These remarks are very Western and factual about trees. What intrigued and what puzzled those in ancient times was how can a tree sustain life for hundreds even thousands of years?<sup>13</sup> Human

awe at the seemingly immortal ‘tree of life’ was seen all around in field and forest leading to their worship and reverence. As we find later, even the Israelites succumbed both in what they began to worship, wooden idols, and where, ‘beneath every spreading tree’.

Many living trees might rightly claim the title ‘tree of life’ though none has the abundance and variety or the ‘healing’ powers of the tree of life we meet at the Bible’s end (Rev. 22:3). Almost unique among natural resources is that a tree’s usefulness does not stop at death. Indeed, life after death is not putting it too strongly when we consider the years and years of benefit and pleasure an oak table gives or the strength beams and rafters afford in supporting a ceiling or roof. Today we would add that such use of wood keeps the carbon stored. And, for a Christian, the singular importance of the paper of the pages of our Bibles in which are recorded the very words of life and, symbolically, Christ’s cross itself as ‘the tree of life’.

We return to the tree of life in Chapter 6, as well as in the final chapter. However, it is not only in Genesis and the Bible that we find the idea. Many ancient Near East civilisations from early times portray a tree being honoured or paid homage, though it is not always clear quite what or how. The 9th Century BC reliefs in the British Museum of the Assyrian King, Ashurnasirpal II, show such a tree with an eagle headed spirit—the model for CS Lewis’s Tash in the Narnia stories—appearing to offer it a pine cone. This is odd since the tree, albeit stylised, suggests a broadleaf not conifer. With no explanatory text we are left guessing, but it is just one example of the tree motif so common in Assyrian and Egyptian imagery and religious life.

The tree of knowledge of good and evil we meet only in Genesis. Such super ethical food did not really exist, but by taking fruit that was forbidden the guilt generated by this first act of disobedience would reveal the existence of good and evil to Adam and Eve and hence the fact of alternatives. The revealing of an alternative to what Adam and Eve had known brought new knowledge about the very goodness of the sinless paradise from which they were about to be ejected.

BELOW: *A mythical, sacred tree paid homage by an eagle-headed spirit, and*

BELOW, LOWER: *by King Ashurnasirpal in ritual robes. (British Museum).*







FACING PAGE: *Figs among the large hand-shaped leaves.*

That this knowledge comes symbolically from a tree, seems fitting. Compared with an animal or flower, there is something permanent, solid, immutable about a tree, just as there is about the fact of good and evil: a fact that Adam and Eve could not hide from, just as the trees of the Garden of Eden could not hide them, and their guilt, from God. Fitting too is something negative about trees that planners and the police both know. They can provide cover harbouring criminals. So consideration of where best to site groups of trees and shrubs amongst housing, as well as the provision of lighting, all has to be part of the mix in developing the built environment. Though today society is abandoning absolutes for tolerance, reasonableness, compromise and flexibility in much of life, recognising right from wrong and good from bad remains every functioning community's foundation. Otherwise, we lose our way. The towering stature and spreading umbrella of a tree over us pictures this superior principle that God's absolutes are, for us, larger than life.

## Figs

Genesis 3:7

The first identifiable tree (just) is in Genesis 3:7.<sup>14</sup> Adam and Eve sewed fig leaves to cover themselves because they were naked. In the Bible two kinds of fig tree are mentioned, the widely cultivated fruit (probably implied here because even today the large hand-shaped leaves of the common fig (*Ficus carica*) are still sometimes sewn together) and the sycomore-fig (*Ficus sycomorus*) which we remember from Sunday School as the tree the diminutive Zacchaeus climbed to see Jesus (Luke 19:4) on his way through Jericho. The sycomore-fig<sup>15</sup> also produces edible fruits which are not as nutritious or sweet and were known as the poor man's figs. It is a common tree and we meet it again.

The common fig is described as the third classical fruit, after the olive and grape-vine, associated

with the beginnings of horticulture in the eastern Mediterranean and south-west Asia.<sup>16</sup> It has a very ancient lineage and history of cultivation and, as with most fruit crops, the key for the grower is to domesticate productive or specially sweet cultivars (genotypes) that arise. Usually this is done by taking cuttings i.e. by means of vegetative propagation. Unusual about the fig is that a single mutation leads to cultivars that produce delicious fruits without requiring pollination and fertilisation, a characteristic called parthenocarpy. Propagation of such desirable forms would have been achieved of old, and still is today, by rooting cuttings of dormant twigs taken in winter.

Adam and Eve used fig leaves to cover themselves. As well as large size, the heavily veined and ribbed leaves sew quite well, not tearing too easily. Ancient Midrash literature<sup>17</sup> suggests a pun or play on words here in that the Hebrew for fig (*t'einah*) sounds very similar to grief or trouble (*to-anah*). Having to sew fig leaves was the beginning, was the first of all the troubles Adam and Eve had begun!

## Cursed and expelled from the Garden

Genesis 3:17–18

We end this first chapter with the scene of Adam and Eve doing wrong by a tree, picking what had been forbidden, and being expelled from the Garden of Eden. It continues: doing wrong by trees and forests which are cut down unnecessarily, whether pristine tropical forests for palm oil or English hedges and hedgerow trees for rape oil. There is plenty of already degraded land suitable for the former, and happily less destruction of the latter than hitherto. But the point remains that, like the first sin, we reap a harvest of toil as soil erodes, floods come, wildlife dies and living becomes more arduous. The cursed ground of Genesis 3:17–18 is an apt description of much degraded land today where forest had been destroyed, soil fertility lost, and often bush and unproductive scrub all that is left.



## The beginnings of farming

Genesis 4

The account of Cain and Abel's offerings of their produce in Genesis Chapter 4 not only betrays their contrasting faith in God, but also presents the two sides of farming: arable and livestock. Archaeology has shown that the Middle East was the cradle of agriculture. In Neolithic times the first evidence of domestication of plants is found in the Fertile Crescent and the Levant (Israel, Lebanon and Syria).<sup>18</sup> The place of trees and their early management, beyond forest clearance or gathering fruits, is unclear, but without doubt the olive was cultivated from a very early time with figs and date palms not far behind.

The long years of toil had begun. The principle of hard work to earn reward was well in place. Trees were both a hindrance, if land had to be cleared, and a hope, offering some of the most useful crops of all to cultivate and resources to have available.

Perhaps we should add, too, that Cain and Abel's offerings remind us of something else. Throughout biblical times society was predominantly agrarian, not industrialised. Most of us today are distant, literally and figuratively, from the countryside and what goes on on the farm or in the forest. Looking at these, which are also distant back in time, adds a further challenge just as do the many biblical metaphors, analogies and allegories that draw on the rural and the pastoral with which we are unfamiliar.



FACING PAGE: *Severe erosion in Ethiopia owing to deforestation. The land has lost its farming value and is costly to rehabilitate.*

## Notes

- 1 This is the familiar translation. The Greek in 1 Pet. 2:24, and also Acts 5:30 and Gal. 3:13, is *xulon*, not *dendron* the usual word for tree, and it has the wider meaning of wood, pole, timber as well as tree. Most modern English translations have 'pole'.
- 2 **Walton, J H** (2009) *The Lost World of Genesis One—Ancient cosmology and origins debate*. IVP Academic, Downers Grove, Illinois.
- 3 The inheritance or passing on of characteristics from generation to generation is more or less fixed in every living cell by a complex pattern of chemicals in the nucleus, the DNA molecules. They make up the genes. DNA has the remarkable capacity to replicate and communicate its structure so that the right kind of growth occurs. The way chemicals (bases) are ordered in the DNA determines that acorns become oaks and that a leaf becomes a leaf and not, say, a root in the wrong place. We have the ability today to intervene in this process (genetic modification or GM) by adding or changing the DNA at certain points to create new characteristics. Also study of DNA in humans shows that we are all descended from one 'super mother' an 'Eve' though the timeline accorded by evolutionary biologists may for some differ from the biblical. For a recent outline from an evolutionary perspective by scientists who are Christians see Lucas, E C, Alexander, D R, Berry, S J, Briggs, A D, Humphreys, C J, Jeeves, M A and A C Thiselton (2016) The Bible, Science and Human Origins. *Science and Christian Belief* 28 (2): 74–99.
- 4 **Fady, B** and **Medail, F** (2004) Mediterranean Forest Ecosystems. In **Burley, J, Evans, J** and **Younquist, J A** (eds) *Encyclopedia of Forest Science* (Oxford: Elsevier Ltd), 1403–1414.
- 5 **Meiggs, R** (1982) *Trees and Timber in the Ancient Mediterranean World*. Clarendon Press, Oxford
- 6 **Thirgood, J V** (1982) *Man and the Mediterranean Forest—A history of resource depletion*. Academic Press, London
- 7 **Fady, B** and **Medail F** (ibid)
- 8 **Eveson, P H** (2001) *The book of origins—Genesis simply explained*. Evangelical Press, Darlington
- 9 **Usher, G B** (2012) *Places of Enchantment—meeting God in Landscapes*. SPCK, London.
- 10 **Donovan, G H, Butry, D T, Michael, Y L, Prestemon, J P, Liebhold, A M, Gatzliolis, D** and **Mao, M Y**. (2013) 'The Relationship Between Trees and Human Health', *American Journal of Preventive Medicine*, 2013; 44 (2): 139-145
- 11 **WHO** (2016) *Urban green spaces and health—a review of evidence*. Copenhagen: World Health Organization (WHO) Regional Office for Europe, 2016. 80 pp.
- 12 **Evans, J** and **Turnbull, J W** (2004) *Plantation Forestry in the Tropics*. 3rd Edn. Oxford University Press
- 13 **Hareuveni, N** (2006) *Tree and Shrub in Our Biblical Heritage*. Neot Kedumim Ltd, Lod, Israel (translated by **Helen Frenkley**).
- 14 **Zohary, M** (1982) *Plants of the Bible—a complete handbook*. Cambridge University Press, Cambridge
- 15 Not to be confused with sycamore (a species of maple (*Acer*)), or sycamine, another name for black mulberry.
- 16 **Zohary, D, Hopf, M,** and **Weiss, E** (2012) *Domestication of Plants in the Old World*. 4th Edition. Oxford University Press.
- 17 **Hareuveni** (ibid)
- 18 **Zohary, et al.** (2012). (ibid).



ABOVE: *The first mention of olive in the Bible is the freshly plucked leaf the dove brought back to Noah as a sign that the floodwaters were receding. As a fruit tree it may well have been the first to have been brought into cultivation providing, principally, food and oil—the latter for cooking, lighting, anointing and cleansing—symbolic of a tree of life. The symbolism of olive for peace and prosperity continued through history.*



# 2

## Genesis 5–50 and Exodus

# From ark to ark

Of all human undertakings Noah's Ark stands out pre-eminent. Not because of grandeur, nor because it worked, nor even that so vast a structure was built so early in history, but because it was constructed in the face of all reason. Noah's neighbours could not and would not see the purpose of it. Yet the ark was completed, and on time, and without sea trials and commissioning, to do the job required because of Noah's faith—that what God said was true and was going to happen.

### Noah's Ark

Genesis 6

We are told the ark was made of wood (Gen. 6:14). It is the first article so described in the Bible, though presumably the harps and flutes (Gen. 4:21), farm implements and many of the buildings in Cain's city (Gen. 4:17) were also. Exactly what kind of wood Noah used we cannot be at all sure: the Hebrew word translated 'gopher wood' in the King James version could be cypress (*Cupressus sempervirens*), and this is what the 2011 NIV has but it footnotes the uncertainty. Some have suggested that the word 'gopher' refers to the way the ark was constructed, with squared or planed beams, or that it is the use of pitch as a sealant for caulking that it signifies. We really don't know. It is possible, too, that the timber is not even available today having been lost in the destruction a flood lasting for months would

have wrought. We do know that in later classical times pitch was a valued and traded commodity not only by the shipwright, but for lining jars, amphora, for storing wine and even, when in liquid form, for flavouring it!<sup>1</sup> The best source of pitch is from tapping pine trees and other resinous conifers though the small turpentine tree (*Pistacia terebinthus*) was a prized source of a resin like substance. However, we really know very little about the ark and can only speculate.

The word 'ark' literally means 'box' or 'chest'. Although the same English word is used for the 'ark' of the covenant (Exod. 25–38), the Hebrew for Noah's Ark only occurs again for the basket bearing little baby Moses among the rushes of the Nile (Exod. 2:2–3). The ship-like designs we find adorning so many children's bibles owe much to the artists' colourful imagination, while the famous flood story in the epic of Gilgamesh indicates simply a box structure. The carefully recorded dimensions of the ark (Gen. 6:15–16) clearly suggest a vessel which would be stable and plainly seaworthy. Beyond this we really can't say. It is only in the choice of the same English word that allows the preacher to exhort: that one 'ark', Noah's Ark, saved a few from the destruction brought by sin while the other 'ark', the ark of the covenant, contained the law which exposes what sin is.

Making things out of wood was not as easy as

